

SEQUENCE LISTING

[E]
<110> Clinton, Gail M.
Evans, Adam
Henner, William D.

<120> HER-2 BINDING ANTAGONISTS

<130> 49321-16

<140> US 09/506,079

<141> 2000-02-16

<150> US 09/234,208

<151> 1999-01-20

<160> 10

<210> 1

<211> 79

<212> PRT

<213> Homo Sapiens

<220>

<221> Variable

<222> 2

<223> Applicants herein disclose Thr and Ser sequence variants at this position

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<221> Variable

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<223> Applicants herein disclose Leu and Pro sequence variants at this position

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<223> Applicants herein disclose Pro and Leu sequence variants at this position

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<223> Applicants herein disclose Leu and Gln sequence variants at this position

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<223> Applicants herein disclose Met and Leu sequence variants at this position

<220>

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<223> Applicants herein disclose Gly, Asp, Ala and Val sequence variants at this position

<220>

<221> Variable

<222> 36

<223> Applicants herein disclose Leu and Ile sequence variants at this position

<220>

<221> Variable

<222> 54

<223> Applicants herein disclose Pro and Arg sequence variants at this position

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<223> Applicants herein disclose Pro and Leu sequence variants at this position

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<222> 73

<223> Applicants herein disclose Asp and Asn sequence variants at this position

<400> 1

Gly	Xaa	His	Ser	Xaa	Xaa	Pro	Arg	Pro	Ala	Ala	Val	Pro	Val	Pro	Xaa
				5					10					15	
Arg	Xaa	Gln	Pro	Xaa	Pro	Ala	His	Pro	Val	Leu	Ser	Phe	Leu	Arg	Pro
			20					25					30		
Ser	Trp	Asp	Xaa	Val	Ser	Ala	Phe	Tyr	Ser	Leu	Pro	Leu	Ala	Pro	Leu
		35					40					45			
Ser	Pro	Thr	Ser	Val	Xaa	Ile	Ser	Pro	Val	Ser	Val	Gly	Arg	Gly	Xaa
		50				55					60				
Asp	Pro	Asp	Ala	His	Val	Ala	Val	Xaa	Leu	Ser	Arg	Tyr	Glu	Gly	
65					70					75					

<210> 2

<211> 419

<212> PRT

<213> Homo Sapiens

<220>

<221> Variable

<222> 342

<223> Applicants herein disclose Thr and Ser sequence variants at this position

<220>

<221> Variable

<222> 345

<223> Applicants herein disclose Leu and Pro sequence variants at this position

<220>

<221> Variable

<222> 346

<223> Applicants herein disclose Pro and Leu sequence variants at this position

<220>

<221> Variable

<222> 356

<223> Applicants herein disclose Leu and Gln sequence variants at

this position

<220>

<221> Variable

<222> 358

<223> Applicants herein disclose Met and Leu sequence variants at this position

<220>

<221> Variable

<222> 361

<222> 361
<223> Applicants herein disclose Gly, Asp, Ala and Val sequence variants at this position

<220>

<221> Variable

<222> 376

<223> Applicants herein disclose Leu and Ile sequence variants at this position

<220>

<221> Variable

<222> 394

<223> Applicants herein disclose Pro and Arg sequence variants at this position

 $\langle 220 \rangle$

<221> Variable

$\langle 222 \rangle$ 404

<222> Applicants herein disclose Pro and Leu sequence variants at this position

 $\langle 220 \rangle$

<221> Variable

$\langle 222 \rangle$ 413

<222> Applicants herein disclose Asp and Asn sequence variants at this position

<400> 2

Met	Glu	Leu	Ala	Ala	Leu	Cys	Arg	Trp	Gly	Leu	Leu	Leu	Ala	Leu	Leu
				5					10					15	
Pro	Pro	Gly	Ala	Ala	Ser	Thr	Gln	Val	Cys	Thr	Gly	Thr	Asp	Cys	Lys
				20				25					30		
Leu	Arg	Leu	Pro	Ala	Ser	Pro	Glu	Thr	His	Leu	Asp	Met	Leu	Arg	His
				35			40					45			
Leu	Tyr	Gln	Gly	Cys	Gln	Val	Val	Gln	Gly	Asn	Leu	Glu	Leu	Thr	Tyr
	50					55					60				
Leu	Pro	Thr	Asn	Ala	Ser	Leu	Ser	Phe	Leu	Gln	Asp	Ile	Gln	Glu	Val
	65				70					75				80	
Gln	Gly	Tyr	Val	Leu	Cys	Ala	His	Asn	Gln	Val	Arg	Gln	Val	Pro	Leu
				85					90					95	
Gln	Arg	Leu	Arg	Ile	Val	Arg	Gly	Thr	Gln	Leu	Phe	Glu	Asp	Asn	Tyr
			100				105					110			
Ala	Leu	Ala	Val	Leu	Asp	Asn	Gly	Asp	Pro	Leu	Arg	Arg	Thr	Thr	Pro
		115					120				125				
Val	Thr	Gly	Ala	Ser	Pro	Gly	Gly	Leu	Arg	Glu	Leu	Gln	Leu	Arg	Ser
	130					135					140				
Leu	Thr	Glu	Cys	Leu	Lys	Gly	Gly	Val	Leu	Ile	Gln	Arg	Asn	Pro	Gln
145					150					155					160
Leu	Cys	Tyr	Gln	Asp	Thr	Ile	Leu	Trp	Lys	Asp	Ile	Phe	His	Lys	Asn

				165					170					175			
Asn	Gln	Leu	Ala	Leu	Thr	Leu	Ile	Asp	Thr	Asn	Arg	Ser	Arg	Ala	Cys		
			180					185					190				
His	Pro	Cys	Ser	Pro	Cys	Cys	Lys	Gly	Ser	Arg	Cys	Trp	Gly	Glu	Ser		
		195					200					205					
Ser	Glu	Asp	Cys	Gln	Ser	Leu	Thr	Arg	Thr	Val	Cys	Ala	Gly	Gly	Cys		
	210					215					220						
Ala	Arg	Cys	Lys	Gly	Pro	Leu	Pro	Thr	Asp	Cys	Cys	His	Glu	Gln	Cys		
225					230					235					240		
Ala	Ala	Gly	Cys	Thr	Gly	Pro	Lys	His	Ser	Asp	Cys	Leu	Ala	Cys	Leu		
				245					250					255			
His	Phe	Asn	His	Ser	Gly	Ile	Cys	Glu	Leu	His	Cys	Pro	Ala	Leu	Val		
			260					265					270				
Thr	Tyr	Asn	Thr	Asp	Thr	Phe	Glu	Ser	Cys	Pro	Asn	Pro	Glu	Gly	Arg		
	275						280				285						
Tyr	Thr	Phe	Gly	Ala	Ser	Cys	Val	Thr	Ala	Cys	Pro	Tyr	Asn	Lys	Leu		
	290					295					300						
Ser	Thr	Asp	Val	Gly	Ser	Cys	Thr	Leu	Val	Cys	Pro	Leu	His	Asn	Gln		
305					310					315					320		
Glu	Val	Thr	Ala	Glu	Asp	Gly	Thr	Gln	Arg	Cys	Glu	Lys	Cys	Ser	Lys		
				325					330					335			
Pro	Cys	Ala	Arg	Gly	Xaa	His	Ser	Xaa	Xaa	Pro	Arg	Pro	Ala	Ala	Val		
			340					345					350				
Pro	Val	Pro	Xaa	Arg	Xaa	Gln	Pro	Xaa	Pro	Ala	His	Pro	Val	Leu	Ser		
		355					360					365					
Phe	Leu	Arg	Pro	Ser	Trp	Asp	Xaa	Val	Ser	Ala	Phe	Tyr	Ser	Leu	Pro		
	370					375					380						
Leu	Ala	Pro	Leu	Asp	Pro	Thr	Ser	Val	Xaa	Ile	Ser	Pro	Val	Ser	Val		
385				390						395					400		
Gly	Arg	Gly	Xaa	Asp	Pro	Asp	Ala	His	Val	Ala	Val	Xaa	Leu	Ser	Arg		
				405					410					415			

Tyr Glu Gly

<210> 3

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> HER-2-specific oligonucleotide primer

<400> 3

tgagcaccat ggagctggc 19

<210> 4

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> HER-2-specific oligonucleotide primer

<400> 4

tccggcagaa atgccaggct cc 22

<210> 5

<211> 22
<212> DNA
<213> Artificial Sequence
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<223> HER-2 cDNA-specific oligonucleotide primer

<400> 5
aacacagcgg tgtgagaagt gc 22

<210> 6
<211> 21
<212> DNA
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<223> HER-2 ECDIIIa-region-specific oligonucleotide primer

<400> 6
ataccgggac aggtcaacag c 21

<210> 7
<211> 20
<212> DNA
<213> Artificial Sequence
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<223> HER-2 ECDIIIa-region-specific oligonucleotide primer

<400> 7
tctgggtacc cactcactgc 20

<210> 8
<211> 22
<212> DNA
<213> Artificial Sequence
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<223> HER-2 exon-specific oligonucleotide primer

<400> 8
ttcacactgg cacgtccaga cc 22

<210> 9
<211> 27
<212> DNA
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<223> HER-2 cDNA-specific oligonucleotide primer

<400> 9
gcacggatcc atagcagact gaggagg 27

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<212> DNA
<213> Homo Sapiens
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<221> Variable

<222> 62

<223> Applicants disclose C, T, A and G variants at this position

<400> 10

ggt	wcc	cac	tca	cyg	cyc	ccg	agg	cca	gct	gca	gtt	cct	gtc	cct	45
Gly	Xaa	His	Ser	Xaa	Xaa	Pro	Arg	Pro	Ala	Ala	Val	Pro	Val	Pro	
				5					10					15	

cwg	cgc	atr	cag	cct	gnc	cca	gcc	cac	cct	gtc	cta	tcc	ttc	ctc	90
Xaa	Arg	Xaa	Gln	Pro	Xaa	Pro	Ala	His	Pro	Val	Leu	Ser	Phe	Leu	
				20					25					30	

aga	ccc	tct	tgg	gac	mta	gtc	tct	gcc	ttc	tac	tct	cta	ccc	ctg	135
Arg	Pro	Ser	Trp	Asp	Xaa	Val	Ser	Ala	Phe	Tyr	Ser	Leu	Pro	Leu	
				35					40					45	

gcc	ccc	ctc	agc	cct	aca	agt	gtc	cst	ata	tcc	cct	gtc	agt	gtg	180
Ala	Pro	Leu	Ser	Pro	Thr	Ser	Val	Xaa	Ile	Ser	Pro	Val	Ser	Val	
				50					55					60	

ggg	agg	ggc	cyg	gac	cct	gat	gct	cat	gtg	gct	gtt	sac	ctg	tcc	225
Gly	Arg	Gly	Xaa	Asp	Pro	Asp	Ala	His	Val	Ala	Val	Xaa	Leu	Ser	
				65					70					75	

cgg	tat	gaa	ggc	tga											240
Arg	Tyr	Glu	Gly												